Claims

We claim:

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A composition comprising an antibody 1. specific for a soluble antigen of a C. parvum sporozoite.

The composition of claim 1 wherein the antibody is a monoclonal antibody.

The composition of claim 1 wherein the 3. antibody exhibits minimal crossreactivity with C. parvum oocyst proteins or peptides.

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The composition of claim 1 wherein the antibody exhibits minimal crossreactivity with other Cryptosporidium species

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The composition of claim 1 wherein the 5. antibody is the antibody deposited with the ATCC as CRL-12604.

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A method for the detection of C. parvum in 6. a sample comprising incubating an antibody specific for a soluble antigen of a C. parvum sporozoite with the sample and detecting the binding of the antibody to the soluble antigen of a C. parvum sporozoite in the sample,\wherein the detection of binding indicates the presence of C. parvum in the sample.

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7. The method of claim & wherein the sample is treated to excyst C. parvum oocysts to release sporozoite antigen.

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The method of claim 6 wherein the sample is a water sample.

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The method of claim 6 wherein the sample
is a biological fluid.
10. \ The method of claim 6 wherein the method
is an immunoassay.
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11. The method of claim 6 having a detection
sensitivity of less than 200 oocysts per milliliter.
12. The method of claim 6 having a detection
sensitivity of less than 100 oocysts per milliliter.
13. The method of claim 6 wherein the sample
has a high turbidity.
14. The method of claim 6 wherein the sample
is treated by a biological mechanism to cause excystation of C.
parvum oocysts in the sample, thereby releasing sporozoites
from viable oocysts in the sample.
15. The method of claim 6 wherein the sample
is treated by mechanical disruption, thereby releasing
sporozoites from viable and non-viable oocysts in the sample.
16. The method of claim 6 wherein the

antibody is the antibody deposited with the ATCC as CRL-

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12604.